AMENDMENTS TO THE CLAIMS

This Listing of Claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims

1. Canceled

2. (Previously Presented) The method according to claim 19, further comprising the steps of amplifying the polymorphous DNA microsatellite marker from the offspring of the afflicted individual and comparing the length of the amplified marker with the length of the amplified polymorphous DNA microsatellite markers from steps (a) and (b).

3. (Previously Presented) The method according to claim 19, further comprising the steps of amplifying two or more different polymorphous DNA microsatellite markers from the tumor and the blood.

4-7. Canceled.

8. (Currently Amended) The method according to claim 19, wherein ~~the~~ said one or more polymorphous DNA microsatellite marker has a length of up to approximately 300 bp.

9. (Previously Presented) The method according to claim 19, wherein at least three, or preferably four, different markers are used.

10. (Previously Presented) The method according to claim 19, wherein the marker is a tumor suppressor gene disease marker.

11-13. Canceled.

14. (Previously Presented) The method according to claim 19, wherein the afflicted individual is a parent of the offspring.

15-18. Canceled

19. (Currently Amended) A method for determining whether an offspring of an individual afflicted with a

phakomatosis, wherein said phakomatosis is a tumor suppressor gene disease has an increased risk of developing the tumor suppressor gene disease comprising the steps of:

a. amplifying one or more polymorphous DNA microsatellite markers for the tumor suppressor gene disease from a tumor of the afflicted individual;

b. amplifying the one or more polymorphous DNA microsatellite markers from the blood of the afflicted individual;

c. comparing the amount and length of the one or more amplified polymorphous DNA microsatellite markers from steps (a) and (b);

d. establishing the loss of an allele in the tumor of the afflicted individual, based on the comparison in step (c);

e. amplifying the one or more polymorphous DNA microsatellite markers from the blood of an offspring of the afflicted individual; and

f. determining which allele of the afflicted individual was inherited by the offspring, wherein inheritance of the allele that is retained in the tumor of the afflicted individual indicates an increased risk of developing the tumor suppressor gene disease.